46. Statistical Multiplexer at Central Office

This is a request for a particular equipment configuration to support a service. It is being met or partially met by some regional companies by offering the following ONA services:

- Category 2, Type A - X.25 Packet Switched BSA
- Category 2, Type B - X.75 Packet Switched BSA
- Statistical Multiplexer

47. X.25 Interface To Packet Switch

This is a request for a service. It is being met by offering the following ONA service:

- Category 2, Type A - X.25 Packet Switched BSA

48. X.75 Interface To Packet Switch

This is a request for a service. It is being met by offering the following ONA service:

- Category 2, Type B - X.75 Packet Switched BSA

49. Access To Data Services

This is a request for a particular application of a service. It is being met or partially met by some regional companies by offering the following ONA services:

- Hot Line
- Warm Line
- Preselection for Data Services

50. B-Channel Switched and Dedicated Access

This is a request for a service that requires development.

51. D-Channel Data Delivered on B-Channel

This is a request for a service that requires development.

52. Multiple D-Channels on B-Channel

This is a request for a service that requires development.

53. ESP Access to D-Channel Signaling

This is a request for a service that requires development.

54. Feature Node Service Interface (FN/SI)

This is a request for a particular interface that requires development.

55. Service Control Point (SCP) Databases

This is a request for a service that requires development.

56. Term Sets and Inband Signaling on Analog Channels

This is a request for a particular interface. It is being met or partially met by some regional companies by offering the following ONA service:

- Category 3, Type C - Dedicated Voice Grade BSA

57. Access to Future Intelligent Functions of ISDN

This is a general request for access to services that may be developed in the future.

58. Compatibility to Existing Terminals

This is a general request that cannot be met by a particular service. It is being met by some regional companies by the various basic serving arrangements (BSAs). If there are particular applications that are not compatible with the BSAs, they must be specifically identified.

59. Mapping ANI to User ID (X.75)

This is a request for a service that requires development.

60. Calls Accepted With BOC's DNIC or ESP's DNIC

This is a request for an attribute of a service. It is being met or partially met by some regional companies by offering the following ONA service:

- Category 2, Type A - X.25 Packet Switched BSA
- Category 2, Type B - X.75 Packet Switched BSA

61. Equal Access to Exchange Network Switching and Transmission

This is a general request that cannot be met with a particular service. It is being met by various BSAs.

If there are particular applications that are not being met by the services offered by the BSAs, they must be specifically identified.

62. Peak Traffic Handling Within Exchange Network

This is a request for a network management capability that requires development.

63. ESP Defined Dynamic Routing

This is a request for a particular application of a service. It is related to requests number 25 and 33. It is being met or partially met by some regional companies by offering the following ONA services:

- Alternate Routing
- Multiline Hunt Group
- Make Busy Key
- Network Reconfiguration

64. Common Channel Signaling Access

This is a request for a particular type of signaling interface associated with various services. It is being met or partially met by some regional companies by offering the following ONA service:

- Category 1, Type B - Circuit Switched Trunk BSA
- Category 4 - Dedicated Network Access Link BSA

65. Dynamic Allocation of Transmission Capacity

This is a request for a service. It is being met or partially met by some regional companies by offering the following ONA service:

- Network Reconfiguration

66. Provision of BOC network status information.

This is a request for a service that requires development.

67. Real Time Access To Exchange Network Testing Facilities

This is a request for a network management capability. It is being met or partially met by some regional companies by offering the following ONA service:

- Access To Operations Support Systems Information

68. Derived Channels That Comply With UL and NFPA

This is a request for a service. It is being met by some regional companies by offering the following ONA services:

- Verify Integrity of Subscriber Lines
- Derived Channels (Monitoring)
- Category 3, Type I - Dedicated Alert Transport BSA

69. One Way Alarm Transmission

This is a request for a service. It is being met or partially met by some regional companies by offering the following ONA services:

- Category 3, Type I - Dedicated Alert Transport BSA
- Derived Channels (Monitoring)
- Category 1, Type A - Circuit Switched Line BSA
- Category 1, Type B - Circuit Switched Trunk BSA

70. Derived Channels Compatible with ISDN

This is a request for two services to interact in a compatible manner. This interaction requires development.

71. Digital Private Lines (DDS)

This is a request for a service. It is being met by some regional companies by offering the following ONA services:

- Category 3, Type F - Dedicated Digital (< 64 kbps) BSA
- Category 3, Type G - Dedicated High Capacity Digital (1.544 Mbps) BSA
- Multiplexing – Digital

72. Diagnostic Channel on DS0 and Subrate Lines

This is a request for a service. It is being met by offering the following service:

- Secondary Channel Capability

73. Error Detection / Error Correction

This is a request for an attribute of a service. It is related to requests 47 and 48. It is being met or partially met by some regional companies by offering the following services:

- Category 2, Type A - X.25 Packet Switched BSA
- Category 2, Type B - X.75 Packet Switched BSA

74. Ability to Detect Breaks in Telco Line Within 60 Seconds

This is a request for a particular application of a service. It is related to request number 68. It is being met or partially met by some regional companies by offering the following ONA services:

- Verify Integrity of Subscriber Lines
- Derived Channels (Monitoring)
- Category 3, Type I - Dedicated Alert Transport BSA

75. Broadband Link(s) for Video Transmission

This is a request for a service. It is being met by some regional companies by offering the following ONA services:

- Category 3, Type E - Dedicated Video BSA
- Category 3, Type H - Dedicated High Capacity Digital (>1.544 Mbps) BSA

76. Ability To Reconfigure Networks

This is a request for a service. It is being met by offering the following ONA service:

- Network Reconfiguration

77. Route Diversity

This is a request for an attribute of a service. It is being met or partially met by some regional companies by offering the following ONA services:

- Category 1 - Circuit Switched BSA
- Category 3 - Dedicated Basic Serving Arrangement
- Category 4 - Dedicated Network Access Link BSA
- Automatic Protection Switching
- Network Reconfiguration
- Route Diversity

78. Automatic Protection Switching

This is a request for a service. It is being met by offering the following ONA service:

- Automatic Protection Switching

79. Private Line Conditioning

This is a request for a service. It is being met by offering the following ONA service:

- Conditioning

80. Multiple Monitors per Loop

This is a request for a particular application of a service. It is being met or partially met by some regional companies by offering the following services:

- Category 3, Type I - Dedicated Alert Transport BSA
- Derived Channels (Monitoring)

81. Clear Access To Data Portion of Derived Channels

This is a request for an attribute of a service. It is being met by some regional companies by offering the following services:

- Category 3, Type J - Dedicated Derived Channel BSA
- Category 1, Type A - Circuit Switched Line BSA (Data up to 19.2 kbps Alternative)

82. Distinctive Ringing

This is a request for a service. It is being met by some regional companies by offering the following services:

- Distinctive Ringing
- Distinctive Ringing - Terminating Screening

83. 4-Wire Interconnection/Switching

This is a request for a particular type of interface. It is being met by or partially met by some regional companies by offering the following ONA services:

- Category 1, Type A - Circuit Switched Line BSA
- Category 1, Type B - Circuit Switched Trunk BSA

84. Access to Clear Channel Transmission

This is a request for an attribute of a service. It is being met by some regional companies by offering the following ONA services:

- Category 3, Type G - Dedicated High Capacity Digital (1.544 Mbps) BSA
- Access To Clear Channel Transmission
- Category 3, Type K - Dedicated Digital (64 kbps) BSA

85. User Initiated Diagnostics

This is a general request for a group of services. These services need to be better defined and then developed. However, this is being met or partially met by some regional companies by offering the following service:

- Access To Operations Support Systems Information

86. Pass Through Diagnostics To User

This is a general request for service. It is being met or partially met by some regional companies by offering the following service:

- Access To Operations Support Systems Information

87. Inband Signaling

This is a request for a particular type of signaling interface. It is related to request number 56. It is being met or partially met by some regional companies by offering the following ONA service:

- Category 3, Type C - Dedicated Voice Grade BSA

88. Bridging

This is a request for a service. It is being met by offering the following ONA service:

- Bridging

89. Monthly Detailed Recording

This is a request for a service. It is being met or partially met by some regional companies by offering the following services:

- Call Detail Recording Reports
- Call Detail Recording Reports (Packet)

90. Automatic Disablement Of Call Waiting Tone During Dial-Up Data Call

This is a request for a service. It is being met or partially met by offering the following ONA service:

- Call Waiting - Cancel

91. Enable / Disable Network DTMF Signaling

This is a request for a service that requires development.

92. Passive In-Band DTMF Tone Transmission

This is a request for a service that requires development.

93. Extend DTMF Tone Set

This is a request for a service that requires development.

94. Tone to Digital Translation

This is a request for a service to operate in a particular manner. This requires development.

95. Multiple Call Forwarding

This is a request for a service to operate in a particular manner. It is related to requests number 1 and 4. It is being met by some regional companies by offering the following ONA services:

- Call Forwarding - Multiple Simultaneous Calls Interswitch

96. Virtual Dial Tone

This is a request for a particular attribute of a service. It is related to requests number 47 and 48. It is being met by some regional companies by offering the following services:

- Category 2, Type A - X.25 Packet Switched BSA
- Category 2, Type B - X.75 Packet Switched BSA

97. Remote Access to User Programmable Functions (Packet)

This is a request for a service that requires development.

98. Remote Speed Call Menu Builder (Packet)

This is a request for a service that requires development.

99. Speed Call Menu Builder (Packet)

This is a request for a service that requires development.

100. Remote Speed Call Menu Access Translator (Packet)

This is a request for a service. It is being met by some regional companies by offering the following ONA service:

- Menu Access Translator - Gateway

101. Carrier Selection On Reverse Charge

This is a request for a service. It is being met by some regional companies by offering the following ONA service:

- Carrier Selection on Reverse Charge

It is also being met or partially met by some regional companies by offering an alternative of the following ONA services:

- Category 1, Type A - Circuit Switched Line BSA
- Category 1, Type B - Circuit Switched Trunk BSA (800 dialing plan alternative)

102. Network Control By Customer From Customer Premises

This is a request for service that requires development.

103. Real Time Traffic Usage Data

This is a general request for a service. It is being met or partially met by some regional companies by offering the following service:

- Access To Operations Support Systems Information

104. Central Office Announcements

This is a request for an attribute of a service. It may be related to request number 25. It is being met or partially met by some regional companies by offering the following ONA services:

- Multiline Hunt Group
- Multiline Hunt Group - C. O. Announcements
- Multiline Hunt Group - Uniform Call Distribution Line Hunting
- Multiline Hunt Group - UCD with Queuing

105. Name & Address of the Calling Party

This is a general request for a service. It is being met or partially met by some regional companies by offering the following service:

- Name of Calling Party

106. Suppression of Audible Click on Call Forwarding (Interoffice)

This is a request for an attribute of a service that requires development.

107. Billing Number Delivery

This is a request for a service. It is being met by some regional companies by offering the following ONA services:

- Calling Billing Number Delivery - FG B Protocol
- Calling Billing Number Delivery - FG D Protocol

108. Privacy (Classes Of Non-Published Service)

This is a request for a service that requires development.

109. Delivery Of Traveling Class Mark

This is a request for an attribute of a service. It is related to request number 107. It is being met or partially met by some regional companies by offering the following ONA services:

- Calling Billing Number Delivery - FG D Protocol
- Flexible ANI Information Digits

110. User ID Associated With Calling Number And/Or Service ID Code

This is a request for a service that requires development.

111. Warm Line

This is a request for a service. It is being met by some regional companies by offering the following ONA service:

- Warm Line

112. Closed User Group (Packet)

This is a request for a service. It is being met by offering the following ONA service:

- Closed User Groups - Packet

113. Fast Select (Packet)

This is a request for a service. It is being met by some regional companies by offering the following ONA services:

- Fast Select Acceptance - Packet
- Fast Select Request - Packet

114. Hunt Group (Packet)

This is a request for a service. It is being met by some regional companies by offering the following ONA service:

- Hunt Groups - Packet

115. Call Redirection (Packet)

This is a request for a service. It is being met by some regional companies by offering the following ONA service:

- Call Redirection - Packet

116. Direct Call (Packet)

This is a request for a service. It is being met by some regional companies by offering the following ONA service:

- Direct Call - Packet

117. Programmed Default Call Forwarding

This is a request for a service that requires development.

118. Restriction of Outgoing Calls (Packet)

This is a request for a service that requires development.

Appendix B: Individual Regional Company Responses to the 118 ESP Requests

ESP REQUEST FOR NETWORK CAPABILITY	AM	BA	BS	NX	PB	SW	Qwest
1. Call Forwarding Busy Line/Don't Answer	CNS	CNS	CNS	CNS	CNS	CNS	CNS
2. Activation Of CF Variable Without Call Completion	CNS	CNS	CNS	CNS	CNS		CNS
3. Call Forward Don't Answer Interoffice	CNS	CNS	CNS	CNS	CNS	CNS	CNS
4. Multiple Calls Forwarded To DID Interoffice	CNS	CNS	CNS	CNS	CNS	CNS	CNS
5. Call Forwarding With Status Information To Answering Bureau	BSE	BSE	BSE	BSE	BSE		BSE
6. Activation of Call Forwarding Variable With Call Completion	CNS	CNS	CNS	CNS	CNS	CNS	CNS
7. Call Forwarding With Call Screening		CNS	CNS		CNS/ BSE	CNS	CNS
8. Call Forwarding With Call Waiting			CNS	CNS	CNS		CNS
9. Call Forwarding With Called and Calling Number	BSE	BSE	BSE	BSE	BSE		BSE
10. Call Forward Don't Answer With Variable Ring Counts	CNS	CNS	CNS	CNS	CNS	CNS	CNS
11. Customer Control of CFBL/CFDA	CNS		CNS	CNS	CNS		CNS
12. Monitor & Barge In							
13. SMDI	BSE	BSE	BSE	BSE	BSE		BSE
14. SMDI With Automatic Ringback							CNS
15. 3-Way Call Transfer	BSE	BSE	BSE/ CNS	BSE	BSE		BSE
16. Speed Calling	CNS	CNS	CNS	CNS	CNS	CNS	CNS
17. Remote Activation of Custom Calling Services	CNS	CNS	CNS	CNS	CNS	CNS	CNS
18. ESP Notification Of ESP's Client Or BOC Control Action							
19. Call Distribution Functions Including Queue	BSE	BSE	BSE	BSE	BSE	BSE	BSE
20. Derived Local Channels	CNS/ BSE	CNS/ BSA	CNS	BSA	CNS/ BSE	CNS/ BSA	BSA
21. Screening	CNS	CNS	CNS		CNS/ BSE	CNS	CNS
22. Calling Directory Number Delivery	BSE	BSE	BSE/ CNS	BSE/ CNS	BSE	CNS	BSE
23. Delivery of Dialed Number	BSE	BSE	BSE/ CNS	BSE/ CNS	BSE	BSA	BSE
24. Uniform Abbreviated Dialing		CNS			CNS		CNS
25. Multiline Hunt Groups	BSE	BSE	BSE/ CNS	BSE	BSE	BSE	BSE
26. Unlimited Size Hunt Groups	BSE	BSE	BSE/ CNS	BSE	BSE	BSE	BSE
27. Individual Access To Each Port In A Hunt Group	BSE	BSE	BSE/ CNS	BSE	BSE	BSE	BSE

ESP REQUEST FOR NETWORK CAPABILITY	AM	BA	BS	NX	PB	SW	Qwest
28. CLASS Features Interoffice	CNS	CNS	CNS/ BSE	CNS	CNS/ BSE	CNS	CNS/ BSE
29. Suppressed Ringing							
30. Trunk Side Access	BSA	BSA	BSA	BSA	BSA	BSA	BSA
31. Trunk Side Connection With Power Ringing							
32. Access to Extended Superframe Data Channel	BSE	BSA	BSA	BSA	BSA	BSE	BSA
33. Trunk Group Make Busy	BSE	BSE	BSE/ CNS	BSE	BSE	BSE	BSE
34. Message Waiting Indication	BSE/ CNS	BSE/ CNS	BSE/ CNS	BSE/ CNS	BSE/ CNS	BSE/ CNS	BSE/ CNS
35. Answer Supervision (Connect/Disconnect Indications) - Line	BSE	BSE	BSE		BSE		BSE
36. Night Transfer	BSE	BSE	BSE/ CNS	BSE/ CNS	BSE	BSE	BSE
37. Faster Signaling On DID		BSE/ CNS	BSE/ CNS	BSE/ CNS	BSE	BSA	BSA
38. Post Dialing DTMF Signaling From Paystations	YES	YES	BSA	CNS	YES	CNS	BSA
39. Selected Number Reverse Billing Rate Period Specific	BSE	BSE			BSE	BSE	BSE
40. Single Number Access For Multiple Locations		BSE	CNS				BSA
41. Ability To Notify Or Interrupt A Customer	BSE/ CNS	BSE/ CNS	BSE	BSE/ CNS	BSE/ CNS	BSE/ CNS	BSE/ CNS
42. Ability To Return Held Call To Customer							
43. Interconnection For Specialized Terminal Equipment	BSA	BSA	BSA	BSA	BSA	BSA	BSA
44. Provision For Sharing An ESP Client Among ESPs							
45. Custom Service Areas	BSA	BSE	BSE	BSA	BSA		BSE
46. Statistical Multiplexer at Central Office	BSA	BSA/ BSE			BSA	BSA	BSA
47. X.25 Interface To Packet Switch	BSA	BSA	BSA	BSA	BSA	BSA	BSA
48. X.75 Interface To Packet Switch	BSA	BSA	BSA	BSA	BSA	BSA	BSA
49. Access To Data Services	CNS	CNS/ BSE	CNS	BSE/ CNS	CNS/ BSE	CNS	CNS
50. B-Channel Switched and Dedicated Access							
51. D-Channel Data Delivered on B-Channel							
52. Multiple D-Channels on B-Channel							
53. ESP Access to D-Channel Signaling							
54. Feature Node Service Interface (FN/SI)							

ESP REQUEST FOR NETWORK CAPABILITY	AM	BA	BS	NX	PB	SW	Qwest
55. Service Control Point (SCP) Databases							
56. Term Sets and Inband Signaling on Analog Channels	BSA	BSA	BSA	BSA	BSA	BSA	BSA
57. Access to Future Intelligent Functions of ISDN							
58. Compatibility to Existing Terminals	BSA	BSA	BSA	BSA	BSA	BSA	BSA
59. Mapping ANI to User ID (X.75)							
60. Calls Accepted With BOC's DNIC or ESP's DNIC	BSA	BSA			BSA	BSA	BSA
61. Equal Access to Exchange Ntwk Switching and Transmission	BSA	BSA	BSA	BSA	BSA	BSA	BSA
62. Peak Traffic Handling Within Exchange Network							
63. ESP Defined Dynamic Routing	BSE	BSE	BSE/ CNS	BSE	BSE	BSE	BSE
64. Common Channel Signaling Access	BSA			BSA	BSA		BSA
65. Dynamic Allocation of Transmission Capacity			BSE/ CNS				
66. Provision of BOC Network Status Information							
67. Real Time Access To Exchange Network Testing Facilities			BSE/ CNS				
68. Derived Channels That Comply With UL and NFPA	CNS/ BSE	CNS	BSA	CNS	BSE/ CNS		
69. One Way Alarm Transmission	CNS	BSA/ CNS	BSA	BSA	BSA	BSA	
70. Derived Channels Compatible with ISDN							
71. Digital Private Lines (DDS)	BSA	BSA	BSA	BSA	BSA	BSA	BSA
72. Diagnostic Channel on DS0 and Subrate Lines	BSE	BSE	BSE/ CNS	BSE	BSE	BSE	BSE
73. Error Detection / Error Correction	BSA	BSA	BSA	BSA	BSA	BSA	BSA
74. Ability to Detect Breaks in Telco Line Within 60 Seconds	CNS/ BSE	CNS/ BSA		BSA	CNS/ BSE		
75. Broadband Link(s) for Video Transmission	BSA	BSA	BSA	BSA	BSA	BSA	BSA
76. Ability To Reconfigure Networks	BSE	BSE	BSE/ CNS	BSE	BSE	BSE	BSE
77. Route Diversity	BSA/ BSE	BSA	BSE/ CNS	BSE	BSA	BSE	BSE
78. Automatic Protection Switching	BSE	BSE	BSE/ CNS	BSE	BSE	BSE	BSE
79. Private Line Conditioning	BSE	BSE	BSE/ CNS	BSE	BSE	BSE	BSE
80. Multiple Monitors per Loop	BSE/ CNS			CNS	CNS		
81. Clear Access To Data Portion of Derived Channels	BSA	BSA	BSA	BSA	BSA		BSA
82. Distinctive Ringing	CNS	CNS	CNS		CNS	CNS	CNS

ESP REQUEST FOR NETWORK CAPABILITY	AM	BA	BS	NX	PB	SW	Qwest
83. 4-Wire Interconnection/Switching	BSA	BSA		BSA	BSA	BSA	BSA
84. Access to Clear Channel Transmission	BSE/ BSA	BSE	BSA	BSE	BSE	BSE	BSE
85. User Initiated Diagnostics			BSE/ CNS				
86. Pass Through Diagnostics To User			BSE/ CNS				
87. Inband Signaling	BSA	BSA	BSA	BSA	BSA	BSA	BSA
88. Bridging	BSE	BSE	BSE/ CNS	BSE	BSE	BSE	BSE
89. Monthly Detailed Recording		BSE	BSE	BSE/ CNS		AN/ BSE	BSE
90. Auto Disable Of Call Wtng Tone During Dial-Up Data Call	CNS	CNS	CNS	CNS	CNS	CNS	CNS
91. Enable / Disable Network DTMF Signaling							
92. Passive In-Band DTMF Tone Transmission							
93. Extend DTMF Tone Set							
94. Tone to Digital Translation							
95. Multiple Call Forwarding	CNS	CNS	CNS	CNS	CNS	CNS	CNS
96. Virtual Dial Tone	BSA	BSA	BSA	BSA	BSA	BSA	BSA
97. Remote Access to User Programmable Functions (Packet)							
98. Remote Speed Call Menu Builder (Packet)							
99. Speed Call Menu Builder (Packet)							
100. Remote Speed Call Menu Access Translator (Packet)							BSE
101. Carrier Selection on Reverse Charge	BSA	BSE	BSA	BSE	BSE		BSA
102. Network Control By Customer From Customer Premises							
103. Real Time Traffic Usage Data			BSE/ CNS				
104. Central Office Announcements	BSE	BSE	BSE	BSE	BSE	BSE	BSE
105. Name & Address of the Calling Party			CNS				
106. Suppression of Audible Click on Call Fwding Interoffice							
107. Billing Number Delivery	BSE	BSE	BSE	BSE	BSE	BSE	BSE
108. Privacy (Classes Of Non-Published Service)							
109. Delivery Of Traveling Class Mark	BSE	BSE	BSE	BSE	BSE	BSE	BSE
110. User Nmbr Assoc. With Calling Nmbr and/or Svc ID Code							

ESP REQUEST FOR NETWORK CAPABILITY	AM	BA	BS	NX	PB	SW	Qwest
111. Warm Line	CNS	CNS	CNS	BSE/ CNS	CNS	CNS	CNS
112. Closed User Group (Packet)	BSE/ CNS	BSE/ CNS	BSE/ CNS	BSE/ CNS	BSE	BSE	BSE
113. Fast Select (Packet)	BSE/ CNS	BSE/ CNS	BSE/ CNS	BSE/ CNS	BSE/ CNS	BSE	BSE
114. Hunt Group (Packet)	BSE	BSE	BSE/ CNS	BSE/ CNS	BSE	BSE	BSE
115. Call Redirection (Packet)	BSE	BSE	BSE/ CNS	BSE/ CNS	BSE	BSE	BSE
116. Direct Call (Packet)	CNS	CNS	CNS/ BSE	BSE/ CNS	CNS	CNS	CNS
117. Programmed Default Call Forwarding							
118. Restriction of Outgoing Calls (Packet)							

AN = ancillary service

Please note – recently, various BOCs have completed, or are in the process of completing, corporate mergers. For Appendix A and Appendix B of ONA Special Report #5, the old company names will continue to be used (for example, Bell Atlantic and NYNEX are listed separately, rather than being combined under the Verizon name; Southwestern Bell and Pacific Bell and Ameritech and BellSouth are listed separately, rather than being combined under the AT&T name).

ATTACHMENT 3

July 31, 2007

Enclosed please find the Services Descriptions section of the ONA Services User Guide. This updates the services descriptions information that was last released on January 31, 2007.

AT&T

Qwest Corporation

Verizon

BELL OPERATING COMPANIES

Service Descriptions

ONA Services User Guide

July 31, 2007

ONA Services

Names, Descriptions, Cross References

FOREWORD

Attached is the Services Descriptions section of the ONA Services User Guide, an update of information that was previously issued on January 31, 2007.

The Services Descriptions section of the ONA Services User Guide represents an agreement on the part of the BOCs for uniform names and technical descriptions of the Basic Serving Arrangements (BSAs), Basic Service Elements (BSEs) and Complementary Network Services (CNSs) that relate to the ESP requests included in BOC ONA Special Report Number 1, Issue 2 (October 1987). That Special Report is a compilation of the 118 requests received by all the BOCs during the input process for ESP requests prior to filing of the 2/1/88 ONA Plans. Some items, marked with an asterisk (*) in their titles, have been deleted after the last issue of the report based on the availability of updated information indicating that they cannot be offered. For each service listed, a table is provided that gives an indication of which BOCs plan to offer the service, the individual BOC's product name, and whether the BOC classifies the service as a BSA, BSE or CNS.

The BSAs, which respond to the 118 ESP requests for ONA services, are listed in the following four categories of Basic Serving Arrangements:

- Circuit Switched Serving Arrangements

  A circuit switched basic serving arrangement (BSA) provides an enhanced service provider (ESP) with a connection to the circuit switched network.

- Packet Switched Serving Arrangements

  A packet switched BSA provides an ESP with a connection to the packet switched network.

- Dedicated Serving Arrangements

A dedicated BSA provides an ESP with a dedicated point-to-point connection through the network.

- Dedicated Network Access Link Serving Arrangements

  A dedicated network access link (DNAL) BSA provides a dedicated data channel between the ESP's termination and a designated central office which contains the specific features required by the ESP. The DNAL is used to transmit control information from the ESP to the network or to deliver information from the network to the ESP.

Following the BSAs are the BSEs and CNSs, which are listed in alphabetical order in the above four BSA categories. These BSEs and CNSs respond to the 118 ESP requests for ONA services that were made to all BOCs. A description of each BSE or CNS is provided, which includes a brief technical description and a table listing the product name for each company that offers the service.

Appendix 1 contains a set of descriptions of ONA services that are offered by one or more BOC in response to requests received independent of the 118 ESP requests received by all BOCs. Included is a technical description and a table with the product name for each company that offers the service.

Appendix 2 contains a list of BOC contacts.

Appendix 3 contains the BSA Matrix, a report that shows the relationship between the BSAs and the BSEs included in the ONA Services User Guide. Included is a table showing the generic name for each BSA, and the specific name used by each company offering the BSA. Also included is a set of tables, one for each BSA, listing which BSEs are associated with the BSA for each company. These matrices only include generic BSAs and BSEs, and do not include the CNSs or any region specific services.

This report does not supersede any information provided in the BOC ONA plans and amendments. All capabilities described are not available in all switching or transmission systems. Generic descriptions of BSAs do not imply that applicable generic functions and capabilities are available or compatible with all types of BSAs. In addition, generic descriptions are intended for informational purposes and their existence does not imply that specific products and/or services are necessarily tariffed and/or available in any or all state/ federal jurisdictions within a particular company's service area. The BSAs, BSEs and CNSs identified in this report cannot be ordered until appropriate tariffs are effective. Some ONA services may not be tariffed in all areas. The reader should refer to the individual BOC ONA plans and amendments or the BOC contacts listed in Appendix 2 to this report for information on BOC availability and deployment plans for the technical capabilities described in this report.

References to switching system generics that have not yet been released by the vendors are based on our current information about which features are planned for inclusion in those generic releases. If the vendors change the availability of any features for future generic releases that are referenced in this document, the availability of some services may be affected.

Technical references that are publicly available are listed for each service, where available. Ordering information for each of the technical references may be found in the *Telcordia Technologies Catalog of Technical Information* (including ordering information for reference documents published by individual regional companies). To order, call 1-866-672-6997 toll free from anywhere in the USA; call (732) 699-6700 for foreign calls; fax (732) 336-2226.

Recently, various BOCs have completed, or are in the process of completing, corporate mergers. For this document, the old company names will continue to be used (for example, Bell Atlantic and NYNEX are listed separately, rather than being combined under the Verizon name; Southwestern Bell and Pacific Bell and Ameritech and BellSouth are listed separately, rather than being combined under the AT&T name).

Questions on this report should be directed to the BOC contacts listed in Appendix 2 to this report.

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BSA Descriptions

BSAs have been arranged into four categories:

1. Circuit Switched
2. Packet Switched
3. Dedicated
4. Dedicated Network Access Link

Each category may have several types. Following are descriptions of the BSA categories and the associated BSA types.

1. Category 1 - Circuit Switched BSA

A circuit switched basic serving arrangement (BSA) provides an enhanced service provider (ESP) with a connection to the circuit switched network. This BSA is capable of supporting analog signals of approximately 300 to 3000 Hz or a circuit switched digital interface with a call type of digital encoded voice, 3.1 kHz or 7 kHz audio, 56 kbps or 64 kbps data transmission. This BSA may also transmit voice grade analog data. The transmission interface may be 2-wire or 4-wire, or derived from a variety of multiplexing alternatives (for example, Digital Signal (DS) level 0 from DS level 1, or DS1 from DS3).

This BSA may support one-way or two-way directionality. Calls are set up and taken down on a call by call basis. The transport/usage element could be intra-office or inter-office.

Route diversity may be available with this serving arrangement.

1.1 Category 1, Type A - Circuit Switched Line BSA (1039)

Service Description

A circuit switched line BSA provides an ESP with a line side connection to the circuit switched network.

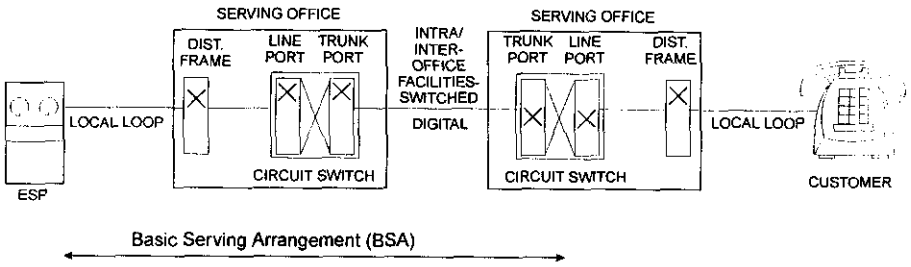
This line side connection could include alternative types of network connection, address and supervisory in-band or out-of-band signaling. Examples of network connections are standard telephone line or a line side type connection (e.g., PBX service). This BSA may support one-way or two-way directionality on a 2-wire or 4-wire transmission interface.

Calls are set up and taken down on a call by call basis. The calling scope may include, for example, an entire Local Access and Transport Area (LATA), a market area or be limited to all or part of a metropolitan area. Directory numbers are assigned from the North American Numbering Plan without any special routing or other use of the number.

Generic Name of BSA	Regional Company BSA Name
Category 1, Type A - Circuit Switched Line BSA*	AM - Circuit Switched Line
	BA - Business Individual Line
	BA – Line Side BSA – FX (3021)
	BA - Line Side BSA – IC (3022)
	BS - Voice Grade - Line - Circuit Switched
	NX - Circuit Switched - Line
	PB - Access Line Arrangement
	SWB - Circuit Switched - Line Side Basic Serving Arrangement (BSA-A)
	Qwest - Voice Grade - Line - Circuit Switched

* Based on the Federal Communications Commission (FCC) CC Docket 89-79 Order dated July 11, 1991, there will be a new line side BSA on FCC approval of tariffs submitted November 1, 1991.

Voice Grade – Line – Circuit Switched — BSA



Alternatives

An alternative is an item that must be selected for the BSA to be technically meaningful. Alternative items may be available from some or all of the Local Exchange Carriers (LECs). Refer to the individual LEC tariff reference diskette for the reference information where LEC defined alternatives may be found. Examples of potential alternatives may be: Service Code Denial and Uniform Call Distribution.

Signaling

Signaling arrangements extend line circuit or signaling circuit alerting information on metallic or fiber facilities from one customer premises location to another customer premises location. The signaling arrangement can be terminated on trunk-like or line side interfaces of the LEC switch. Examples of address signaling on an analog interface are dial pulse or dual tone multifrequency (DTMF) with supervisory signaling of loop start or ground start. A digital interface will offer address and supervisory signaling via an out-of-band standardized protocol.

Transmission

The subject of transmission covers a broad range of performance considerations related to the physical facilities that compose network architecture. Transmission parameters are designed to provide objective transmission performance characteristics, as perceived by the end user and LEC, between the points of termination. Transmission parameters are defined for each Network Interface (see below) supporting this BSA. These parameters are defined in the reference documentation.

Network Interfaces

The electrical and physical interface with the LEC is described by a Network Channel Interface (NCI) code for each end user termination and each service provider termination. NCI codes are provided to aid the user in understanding the relationship of the network interface to the electrical or optical characteristics of the interface. NCI codes have four basic components: (1) number of conductors (wire or fibers), (2) protocol code, (3) nominal reference impedance code, and (4) any applicable protocol options.

References

- GR-334 Switched Access Service: Transmission Parameter Limits and Interface Combinations, Issue 1, July 1994
- Qwest's document 77316 Pacific Northwest Bell's Addendum to Voice Grade Switched Access Service TR-NPL-000334, April 1986.